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UNITED STATES DEPARTMENT OF AGRICULTURE
Agriculture Research Administration
Bureau of Entomology and Plant Quarantine
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STATEMENT ON 1947 JAPANESE BEETLE COLLECTIONS AND PROPOSED 1948 QUARANTINE PROGRAM

Annual Federal-State scout inspections outside of areas regulated by the Federal Japanese Beetle Quarantine have indicated that, in general, beetle occurrence has not changed greatly in recent years. A rather detailed report of the results of operations during the 1947 season is attached. This report gives the results of trapping and scouting in cities, towns, plant-growing establishments and airfields in sections of the United States outside of areas under Federal quarantine regulation during 1947 and includes a summary of all collections of beetles made during the last five years in these sections. It also indicates the localities where treatments have been made including those proposed, but not yet completed, following the discoveries of the 1947 season.

All of the definite and continuous infestations and most of the isolated infested areas are under Federal regulation. Some of the less significant isolated areas where beetle collections have been made are regulated by State quarantines. The State quarantine regulations are patterned after the Federal regulations. Enforcement of the State regulations is under Federal supervision. There are several localities where from one to many beetles have been found, which are not under Federal or formal State quarantine. In most of these there is no evidence of established infestation, or there is no movement of regulated articles. In the few localities where there may be some risk of spread by artificial means the regulation of all commodities covered by quarantine would not now contribute to retardation of spread of the beetle and adequate protection is secured by state requirements controlling special articles under agreements carried out in cooperation and under the direction of the Federal Government.

At many isolated areas where beetles have been collected during the 1947 season cooperative suppressive programs have been continued or inaugurated. These control measures included both soil treatment and foliage treatment, and are believed to be adequate to prevent such areas from becoming centers of spread. The beetle collections of 1947 have been followed by the application of DDT and lead arsenate soil treatments to 560 acres in 25 localities in 8 states. The results secured from the cooperative application of soil treatments at isolated points of infestation indicate that such control measures can reduce and hold beetle populations to non-hazardous levels. Some of the outstanding examples of these results are: St. Louis, Missouri where 1351 beetles were collected in 1934 and 8 in 1947; Chicago, Illinois with a peak collection of 3700 in 1936 and 81 in 1947; Highland Park, Illinois where 5608 beetles were taken in 1941 and 122 in 1947; Gallipolis, Ohio had 2520 in 1942 and 14 in 1947; River Rouge, Michigan, 278 in 1945 and 10 in 1947.

Soil treatment is expensive and there are some limits to its application. Information recently developed indicates that control possibilities can be expanded by the use of foliage sprays either alone or in combination with soil treatments.

Previous to the use of DDT there was no effective practical foliage spray to combat the beetle at collection points outside of the regulated areas. DDT foliage treatment using a mist blower applicator to kill adults of the beetle was first tried in 1945. These preliminary tests indicated that DDT applied to foliage in this manner might be an effective and practical method for such control. Field tests on a larger scale using various formulations and applicators in 1946 gave further indications of the effectiveness of DDT as a foliage treatment.

During 1947 this treatment was used extensively within and outside of regulated areas, and additional information was obtained about formulations, applicators, immediate and residual effects. Foliage treatments aid materially in reducing populations, as illustrated by the following test where two applications made during 1947 at Shenandoah, Virginia, an isolated area under Federal quarantine regulation, reduced the number of beetles collected in 1947 to approximately 20,000 as compared with 90,000 collected in 1946. The collections were made by using 150 traps placed in identical locations each year and operated during the same periods of beetle development.

In 1947 several DDT foliage treatments were made in 38 localities outside of federal regulated areas in cooperation with officials of 10 states. Timely DDT foliage treatments will be required for more than one season to keep the beetle under control. Such treatments are planned for 1948 when there will be available additional State and Federal-owned equipment.


The coordinated cooperative program conducted to retard the spread of the Japanese beetle provides for the use of the following three main procedures: (1) Including the area under Federal and companion State quarantine; (2) Including the area under State quarantine only, but operated cooperatively with Federal supervision; and (3) Carrying out cooperative control operations to suppress outlying infestations. Except under unusual circumstances and primarily in local areas where heavy populations of beetles create hazard of spread by artificial means, no Federal funds are used to apply control measures (other than colonizing natural enemies) in areas included under Federal quarantine. In areas covered by State quarantine only, where conditions warrant, artificial control measures may be applied on a cooperative basis in addition to Federal leadership in supervision of quarantine requirements. In outlying areas where inspections indicate the presence of established infestations, and where there is absence of risk of spread through the movement of articles that would be regulated, control measures are applied cooperatively to prevent or retard the development of infestations which would become new centers of spread.

The practices followed under this program provide, with the means available, more effective protection of uninfested areas than would be attained by extension of the Federal quarantine alone. It stimulates cooperative effort, yet provides for appropriate safeguards on the movement of commodities which may carry the pest. It provides a satisfactory basis for considering, under the primary objective - prevention of spread -, the interest of groups affected by the program designed to retard the spread of the Japanese beetle. These groups include: (1) States where no beetles have been found; (2) States where State, Federal and other agencies have expended public and private funds to control the insect where it has been found outside of Federal regulated areas; (3) States and areas subject to Federal quarantine; and (4) Producers, shippers, dealers, consumers and carriers of commodities affected by quarantine regulation.

At the present time, free movement of regulated articles is possible between the areas under Federal regulation. This presents little hazard to the retardation of spread program when the separate regulated areas are close to the main regulated area. Infestations have been established at certain widely separated points well removed from the area of continuous infestation. Where it is necessary to control movement from these areas it seems advisable to place them under Federal quarantine but to protect them from further infestation. This can be provided by use of separate quarantines. Only a limited extension of the area regulated under Federal quarantine will be needed this year. The additions to the area regulated under Federal quarantine will be the remaining unregulated areas in Charles, St. Marys, and Allegany Counties in Maryland; the town of Irondequoit in Monroe County, New York; and all of King George County, the district of Port Royal in Caroline County, and the district of Madison in Orange County in Virginia. It is proposed that additional small isolated areas be placed under State quarantine and the regulations be carried out cooperatively with Federal supervision. The City of Huntington and Central Township in Doddridge County, West Virginia have already been placed under State regulation.

The proposed action is in agreement with the current program and is deemed consistent with the interests of all concerned. It provides for control of the Japanese beetle at isolated localities to prevent a beetle population increase which may be a source of spread. It should encourage States and other interested parties to expand co-operative treatment programs through the protection of the investments made in such programs. Between \$85,000 and \$90,000 will be spent this calendar year by State and other non-federal cooperating agencies for trapping and treatment.

The foregoing and the accompanying report are distributed for the information of those interested in and concerned with the Japanese beetle control program. They supply information in addition to that which will be given in the "Notice of Rule Making" in reference to the Federal Japanese Beetle Quarantine that will appear in the Federal Register, in advance of revision of the Federal Quarantine.


Chief of Bureau

Report of Japanese Beetle Scout Inspection Outside
Federal Regulated Areas - 1947

Scout inspection for the Japanese beetle outside areas under Federal quarantine regulation in 1947 was done in 666 localities, in 38 states. Some work was done in all non-regulated states except Arkansas and Nevada. Included in the 666 localities are 240 places where inspectors scouted 570 plant-growing establishments and environs in 13 states. Also included in the totals are 150 localities where 165 airports were scouted in 35 states. Because of a depleted trap supply, the number of traps operated was reduced to 37,000. However, the total localities scouted this year approximate the 1946 total.

Beetle collections were made in 105 localities in 14 of the 38 states. First record finds of a single beetle each were reported from 8 places in 5 states. In 20 of the remaining 97 places re-collections of beetles were considered to be of sufficient significance to require quarantine action or treatment. Treatment was also applied to a large number of the remaining re-collection localities. DDT was used extensively in soil treatment this year. DDT insecticides were also used in many localities as a foliage treatment. This foliage treatment was applied in many cases as soon as the beetles were found. Usually repeat applications were made during the season. It is planned to apply similar DDT foliage treatments next year at many of these localities in cooperation with the states concerned. Included among the above are beetle finds on or near 10 plant-growing establishments in Virginia, Ohio, New York and West Virginia. All of these establishments are now under state regulation with Federal supervision. From 1 to 4 beetles were found on 8 airfields in Florida, Georgia, Virginia, South Carolina, and Tennessee. The attached table shows the number of beetles collected each season from 1943-1947 inclusive at all localities outside of areas regulated under the Federal quarantine, and indicates the localities where treatments have been applied or are proposed as a result of collections made during 1947.

West of the Mississippi River, scout inspection was carried on to some extent in every state except Arkansas and Nevada. A total of 200 places was scouted in this region. These included the premises and environs of plant-growing establishments in 16 localities and 100 airfields. No beetles were found except in St. Louis where 8 were collected. The State of Missouri applied DDT soil treatment to 8 acres.

South of the Ohio and Potomac Rivers, a total of 220 places was scouted, including 30 airfields. Also included were plant-growing establishments in 115 localities. In this region some important beetle collections were made in North Carolina and Virginia. Collections of some significance were made in Georgia and West Virginia. In Florida 5 beetles were found on two airports. Single beetles were taken in two places in South Carolina. One of these was the airport at Greenville. One beetle was found in the Nashville, Tennessee Airport. No beetles were reported from Alabama or Mississippi. Additional information about the situation at these localities follows:

Florida: Four of the five beetles reported from this state were collected at the 36th Street Airport in Miami. The other beetle was taken at Morrison Field, West Palm Beach. All of these beetles can be considered to be 1947 hitchhikers from infested areas. No treatments were necessary at these airfields which will be re-inspected in 1948.

Georgia: In Atlanta, 26 beetles were found in 4 separate residential areas. DDT foliage treatments were applied twice during the season to points in each collection location, and repeat foliage treatments are planned for 1948.

Many of the 438 beetles collected this year in Dahlonega were in the areas where lead arsenate and DDT soil treatment was applied during the fall of 1946. Two timely applications of DDT foliage treatments were applied during the summer to all treatable foliage in this village and roads leading therefrom. The State Entomologist has on hand material for retreating foliage during 1948. Dahlonega is an isolated community without railroad facilities and has no plant-growing establishments, and there is no shipment of regulated articles from the town.

All but one of the remaining beetle collections in this state were at airports. Three beetles were reported from the Atlanta Airport and one beetle each from airfields at Macon and Savannah. All of these are probably 1947 importations. No treatments were made at these fields. A single beetle was taken at Austell near Atlanta and DDT foliage treatment was applied. These places will be re-inspected in 1948, and DDT foliage treatments will be applied if necessary.

South Carolina: DDT foliage treatment was applied to plants in the vicinity of the single beetle finds in Chesnee and the Greenville Army Airfield. No other beetles were reported from this state.

North Carolina: 106 localities were scouted. Included were the premises of 215 plant-growing establishments and their environs. Numerous beetles were reported from Asheville, Hendersonville, Blowing Rock and Calypso-Mt. Olive. Initial and repeat DDT foliage treatments were applied in all of these places. Asheville, Hendersonville, and Blowing Rock are under State quarantine regulation with local Federal supervision. The beetles in the Calypso-Mt. Olive area were taken mostly from two adjacent farms which produce general farm crops. There are no nurseries or greenhouses in this area. The farm products produced in the section are those which do not constitute a hazard of beetle spread and are unregulated when moved from lightly-infested sections included under quarantine. Continuation of the cooperative state-federal DDT foliage treatments in this area is planned for 1948. DDT soil treatment was applied to 221 acres in 9 cities and towns. These places are Archdale, Charlotte, Clinton, Durham, Gastonia, Greensboro, High Point, Raleigh, and Winston-Salem.

From 1 to 15 beetles were collected in residential sections or near railroad yards in 10 other communities scattered throughout the state. No treatments were applied to these beetle collection locations. All of these places will be reinspected in 1948 and foliage treatments are planned. In the extensive nursery and greenhouse scouting survey which was carried on in cooperation with the State and the Bureau's White-Fringed Beetle project, no beetles were found on or near establishments located outside of areas under state regulation.

Tennessee: There was an extensive scout inspection in this state in 1946. This year the only areas scouted were in the eastern section adjacent to North Carolina, and scattered airports. One beetle was taken at the Nashville Airport. This may be considered as a 1947 hitchhiker from the main area of infestation.

Virginia: Beetle collections were reported from 25 scattered localities including 6 where single beetles were collected. From 3 to 18 beetles were taken in residential sections in 12 of the remaining 19 locations. DDT foliage treatment was applied in 4 of these 12 localities. Numbers of beetles were collected in Alta Vista, Battletown District in Clarke County, Clifton Forge, Covington, Gordonsville, Lovingsston, Orange, and Rappahannock Academy. Lead arsenate soil treatment had been applied previous to 1947 in Alta Vista, Clifton Forge, and Covington. Following collection of beetles in 1947, initial and repeat DDT foliage treatments were applied in Alta Vista, Clifton Forge, Covington, Lovingsston and Orange. Similar treatments will be made in 1948, in the four first mentioned areas and close inspections made to assure that appropriate steps are taken to prevent spread. Late in the season beetles were reported to be numerous in the eastern section of Battletown District in Clarke County adjacent to the western boundary of the regulated area in Loudon County. There are no nurseries or greenhouses at this locality, and until more definite information has been obtained about this situation, any quarantine action will be delayed. However, scout inspection will be done in 1948. Gordonsville, Rappahannock Academy and Orange are in the areas to be included under the proposed extension Federal quarantine.

A total of 8 beetles was found in two small local nurseries outside the areas regulated by the Federal quarantine. These two establishments are under state quarantine regulation with local Federal supervision.

West Virginia: A light spot infestation was discovered in Doddridge County. The beetles were located in a rural area where there are no nurseries, and no regulated articles are shipped from the area. Thirty-six beetles were taken in a city sales lot in Huntington of a nearby nursery. These beetle collection locations are under state quarantine regulation with Federal supervision.

The fact that sufficient Federal funds were not available when needed prevented a thorough scouting of sections of this region. This is especially true in North Carolina, Virginia and West Virginia. More extensive scout inspection is planned for these states next year.

Maryland: Scouting inspection in the unregulated sections of Charles and St. Marys Counties showed scattered infestation. These sections will be placed under Federal quarantine regulation.

New York: Beetle collections were made in 10 localities in western New York. In 3 of these places, from one to three beetles were taken in residential areas where no control action is required. Small numbers of beetles were found on or near 5 small plant-growing establishments doing a local business in Penfield and Geneva which are just outside the regulated areas. All of these establishments are under state quarantine agreement with Federal supervision. Approximately 1500 beetles were collected on a golf course in Newark, New York. DDT treatment was applied to foliage and as a surface application to 55 acres on and adjacent to the golf course. None of the beetles collected there were near plant-growing premises. All of the plant-growing premises and environs in this town and adjacent countryside were scouted several times during the season, and no beetles were found. In previous years, some beetles had been collected on unit properties of a large nursery here. Various control methods were applied by the nursery, and it has been operating under state quarantine with local Federal supervision. This year the establishment applied

heavy DDT treatment to all sections of the nursery containing saleable plants. State and local officials propose to apply soil treatments in Falconer, Geneva, Jamestown and Niagara Falls. The Federal regulated area will be extended to include Irondequoit.

New England: The only beetle finds in New England outside of areas under Federal quarantine regulation were the 40 taken at Bar Harbor, Maine, where DDT soil treatment has been applied to 9 acres.

In the mid-west, beetles were collected in 29 localities in Illinois, Indiana, Michigan and Ohio.

Illinois: Beetles were taken in four places. Single beetles were found at Lake Forest and Summit. The collections in Chicago were reduced to 81 beetles, all found near but outside of areas treated previously. DDT soil treatment was applied to 60 acres. In Highland Park, 122 beetles were collected on properties adjacent to the area where a light infestation discovered in 1941 had apparently been eliminated by previous soil treatments. DDT foliage treatment was applied to the new area during the summer, and only 2 of the 122 beetles were collected after this treatment was applied. DDT soil treatment was applied to approximately 10 acres.

Indiana: There were five localities where from 1 to 11 beetles were found in this state. A total of 16 acres was treated with lead arsenate in Elkhart and Hammond. All of the 11 beetles taken in Indianapolis were in the vicinity of a large railroad yard where conditions are not favorable for beetle development, and these beetles can be considered to be 1947 importations. Soil treatment is impractical at this point, but DDT foliage treatment might be of value in such a location.

Michigan: From 3 to 39 beetles were collected in Dearborn, Grand Rapids, Grosse Pointe Park, Kalamazoo, and River Rouge. Lead arsenate and DDT soil treatments were applied to a total of 76 acres in these towns. DDT foliage treatment was done in Grosse Pointe Park. Approximately 3000 beetles were taken in the southern section of Detroit bordering River Rouge. This isolated section of Detroit had not been surveyed in recent years. There are no nurseries or greenhouses in this part of Detroit. DDT foliage treatments were applied, and lead arsenate soil treatments covered 77 acres.

Ohio: Scout inspection in Ohio resulted in collection of from 1 to 14 beetles in 12 localities, 33 in Painesville, and 60 beetles in Belpre. Initial and repeat DDT foliage treatments were made at all of these places. A total of 28 acres was treated with DDT soil treatment in Sharon Township, Franklin County, Painesville and Perry. Soil treatments had been done in all but two of these 14 locations in previous years. In Belpre extensive soil treatment had been applied in the past. The 60 beetles taken there this year were outside of the soil treated areas. No soil treatment was applied to this new area. It is proposed to apply foliage treatments in 1948 and state facilities are already available for repeated DDT foliage treatments during 1948. Beetles were found on 2 nurseries in Ohio outside regulated areas. These 2 nurseries and 3 others where beetles were found in 1946 are under state regulation with local Federal supervision.

JAPANESE BEETLE SCOUT INSPECTION
OUTSIDE PRESENT REGULATED AREA
POSITIVE RESULTS
1943 - 1947

Number of Japanese beetles collected:

* First record

0 Inspected negative

- Not inspected

Tl Lead arsenate soil treatment

Td DDT soil treatment

t DDT foliage treatment

p Proposed soil treatment

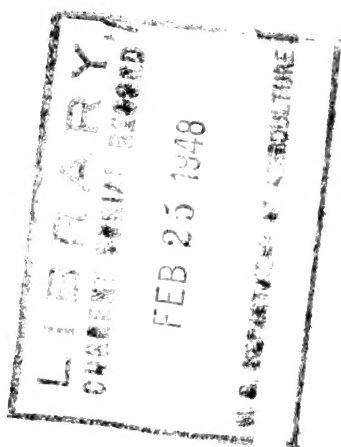
Locations	1947	1946	1945	1944	1943
<u>FLORIDA</u>					
Eglin Army Airfield	0	1	-	-	-
Jacksonville	-	0	0	5-Tl	0
Miami 36th St., Airport	4	3	0	-	-
*West Palm Beach					
Morrison Field	1	0	0	-	-
<u>GEORGIA</u>					
Atlanta	26-t	17-t	13-Tl	17-Tl	8-Tl
Atlanta Airport	3	0	0	-	-
Augusta	-	3	1	9	11-Tl
Austell	1-t	2	1	-	-
Dahlonega	438-t	245-Tl, Td, t	37-Tl	-	-
East Point	0	-	0	3	5
*Macon - Warner - Robins Fld.	1	0	-	-	-
Savannah - Hunter Fld.	1	0	1	-	-
Toccoa	-	0	1	17-Tl	21-Tl
<u>ILLINOIS</u>					
Chicago	81-Td	165-Tl	164-Tl	708-Tl	257-Tl
Cicero	-	0	-	3	1
East St. Louis	-	0	1	2	16-Tl
Highland Park	122-Td	22-Tl	5	10	63-Tl
Lake Forest	1	1	-	-	-
Oak Park	-	0	-	0	1
*Summit	1	-	-	-	-
<u>INDIANA</u>					
Elkhart	7-Tl	25-Tl	21-Tl	35-Tl	9
Fort Wayne	2	0	-	96-Tl	8
Hammond	5-Tl	1	0	54-Tl	24-Tl
Indianapolis	11	13-Tl	3	20-Tl	32-Tl
Logansport	0	-	0	7-Tl	7
Muncie	-	0	-	1	-
Richmond	1	2	-	4-Tl	17-Tl
Terre Haute	0	1	-	0	-
Whiting	0	1	1	-	0
<u>IOWA</u>					
Fort Madison	0	1	-	-	-
<u>KANSAS</u>					
Kansas City	-	0	1	-	-
<u>LOUISIANA</u>					
New Orleans Airport	0	0	1	-	-
<u>MAINE</u>					
Bar Harbor	40-Td	0	-	-	-

	<u>1947</u>	<u>1946</u>	<u>1945</u>	<u>1944</u>	<u>1943</u>
<u>MICHIGAN</u>					
Dearborn	3-T1	-	0	2	2
Detroit	3042-T1	12-T1	24-T1	95-T1	86-T1
Ecorse	-	0	6	-	-
Flint	-	0	0	11-T1	37-T1
Grand Rapids	39-Td	92-T1	166-T1	-	-
*Grosse Pointe Park	25-T1	-	-	-	-
Kalamazoo	4-Td	10-T1	63-T1	-	-
Melvindale	-	1-T1	1	0	1
Muskegon	0	1	7-T1	-	-
River Rouge	10-T1, Td	15-T1	278-T1	42-T1	24-T1
Wyandotte	0	1	-	-	-
<u>MISSOURI</u>					
Bridgeton, St. Louis Apt.	0	1-T1	0	0	0
Kansas City Airport	0	0	0	1	0
St. Louis	8-Td	51-T1, Td	7-T1	4-T1	14-T1
<u>NEW YORK</u>					
Avon	0	-	-	0	37-T1
Batavia	0	0	2	0	-
Bath	-	2	-	-	-
Canandaigua	0	0	-	4	4
Chestertown	-	0	-	2	-
Dunkirk	1	-	0	1	11
Fairport	3	-	54-T1	-	-
Falconer	144(p)	93	10	-	-
Gardenville	0	0	1	-	-
Geneva	165(p)	-	94-T1	197-T1	37-T1
Hammondsport	-	2	-	-	-
*Irondequoit	219	-	-	-	-
Jamestown	14(p)	-	7-T1	31	154-T1
Lake George	-	0	-	1	-
Lyons	0	-	-	0	1
Medina	0	-	0	2	2
Mexico	-	6	5	-	-
Newark	1496-Td	16-Td	-	7-T1	1
Niagara Falls	19(p)	3	--T1	20	71-T1
North Tonawanda	1	3	-	22	7
Ogdensburg	0	-	-	0	315-T1
*Penfield	10	-	-	-	-
Plattsburg	-	4	9	0	5
Port Henry	-	-	0	1	-
Rouses Point	-	4	-	-	0
Schroon Lake	-	0	-	2	-
Silver Creek	-	0	2	7	60-T1
Spring Lake	-	0	-	1	-
Ticonderoga	-	-	0	2	-
Westfield	-	0	2	2	27-T1
Williamson	0	17-Td	-	31-T1	-
<u>NORTH CAROLINA</u>					
Archdale	287-Td	38	6	-	-
Asheboro	-	0	1	-	-
Asheville	Numerous - t	- t	-	-	-
Azalea	-	-	-	2	-
Black Mountain	0	-	0	3	-
Blowing Rock	Numerous - Td, t	-	-	-	-

	<u>1947</u>	<u>1946</u>	<u>1945</u>	<u>1944</u>	<u>1943</u>
<u>NORTH CAROLINA cont'd.</u>					
Boone	1	7	-	3	-
Burgaw	0-t	12	5	22-T1	-
Burlington	15	-	0	-	0
Calypso	Numerous - t	929-Td	-	1	-
Candler	0	-	1	-	-
Canton	0	1	1	3	-
Charlotte	24-Td	4	3	-	5
Charlotte Airport	0	0	2	-	-
Clinton	79-Td	18	-	5	-
Columbia	-	2	-	1	-
Dunn	0	293-Td	-	222-T1	-
Durham	75-Td	-	47-T1	-	2
East Flat Rock	0	9	-	2	-
East Spencer	-	-	32	11	127
Elizabeth City	7	4	-	72-T1	38-T1
Fayetteville	0	1	-	2	0
Flat Rock	-	-	-	1	-
Fletcher	-	10	-	-	-
Gastonia	55-Td	4	-	60-T1	52-T1
Greensboro	55-Td	9	0	8	19-T1
Hamlet	-	-	-	-	1
Hendersonville	Numerous - t	- t	-	-	-
Hickory	6	0	-	2	-
High Point	780-Td	168-Td	-	26-T1	9
Kannapolis	-	0	1	-	-
Iandis	0	0	3	-	-
Lenoir	8	1	-	4-T1	-
Lexington	0	0	-	2-T1	-
Marshall	0	0	0	1	-
Mayodan	13	5	1	-	-
Mount Olive	Numerous - t	51-Td	4	2	-
No. Wilkesboro	-	0	-	1	-
Old Fort	-	0	-	1	-
Oteen	0	-	-	82	-
Raleigh	52-Td	7	-	35-T1	13
Reidsville	9	0	-	2	19-T1
Rocky Mount	0	9	5-T1	-	14-T1
Salisbury	0	-	29-T1	88-T1	58-T1
Spencer	0	-	41-T1	63-T1	4
Spruce Pine	-	0	-	6-T1	-
Statesville	0	-	-	0	1
Swannanoa	-	-	1	-	-
Thomasville	14	3	-	-	0
Warsaw	0	3	-	10-T1	-
Washington	-	0	-	2	-
West Jefferson	4	2	-	13	-
Wilmington	0	-	0	3	38-T1
Wilmington Airport	0-t	22	-	-	-
Wilson	2	-	8-T1	3	12
Winston-Salem	76-Td	-	7-T1	-	4

	<u>1947</u>	<u>1946</u>	<u>1945</u>	<u>1944</u>	<u>1943</u>
<u>OHIO</u>					
Ashland	0	0	1	23-T1	-
Athens	-	0	-	-	1
Bellevue	2-t	-	84-T1	39-T1	135-T1
Belpre	60-t	11	32	82-T1	72-T1
Bucyrus	0	1	-	-	0
Caldwell	0	-	-	0	1-T1
Chesapeake	0	-	1	-	-
Chillicothe	4-t	-	0	-	0
Cincinnati Arprt. area	0	-	0	5-T1	6-T1
Crestline	1-t	-	11-T1	27-T1	24-T1
Elyria	1-t	-	8-T1	7-T1	-
Fostoria	0	0	-	1	2-T1
Fowlers Mills	-	-	-	0	1-T1
Gallipolis	14-t	-	40-T1	12-T1	329-T1
Geneva	10-t	7	54-T1	8-T1	-
Hamilton	0	2	1	-	-
Kinsman	0	1	-	-	-
Lima	1-t	-	-	0	1-T1
Lorain	0	-	2-T1	9-T1	7-T1
Loudonville	12-t	-	3-T1	-	-
Marion	1-t	-	0	17-T1	50-T1
Maumee	0	1	-	-	-
Mt. Vernon	1-t	-	0	-	0
Nelsonville	0	-	-	0	1
New Concord	0	-	26-T1	30-T1	19-T1
Painesville	33-Td	32-Td	11-T1	7-T1	-
*Perry	5-Td	-	-	-	-
Rockbridge	-	0	-	1	34
Sandusky	-	-	-	0	2
Sharon Twp. Franklin Co.	10-Td	-	-	-	-
Shelby	-	0	-	1	-
So. Zanesville	0	-	4-T1	4	29-T1
Springfield	-	0	1	-	-
Van Wert	-	-	0	1-T1	-
Wellington	-	0	-	1	0
Willard	0	-	5-T1	3-T1	1
Zanesville	0	-	0	1	4-T1
<u>PENNSYLVANIA</u>					
Greenville	0	-	-	-	14
<u>SOUTH CAROLINA</u>					
Charleston	-	-	-	0	2
Charleston Airport	0	1	3	-	-
*Chesnee	1-t	-	-	-	-
Columbia	-	0	1	-	0
Florence	-	0	-	2	76-T1
Greenville	-	6	25	47	20-T1
Greenville AAB	1-t	6	-	-	-
Spartanburg	-	-	0	0	1
<u>TENNESSEE</u>					
Bristol	-	0	-	1-T1	5
Kingsport	-	0	-	0-T1	5
Memphis Airport	-	0	2	-	-
Mountain City	0	2	-	6-T1	-
Nashville Airport	1	1	-	-	-

	<u>1947</u>	<u>1946</u>	<u>1945</u>	<u>1944</u>	<u>1943</u>
<u>VERMONT</u>					
Barre	-	0	1	-	0
Richmond	-	0	-	1	-
<u>VIRGINIA</u>					
Altavista	826-t	-	9-T1	-	-
Amherst	6-t	2	-	-	-
Ashland	15	17	9	-	-
Barboursville	0	2	-	-	-
Bedford	18-t	2	1	-	-
Berryville	16	-	0	-	-
Bowling Green	5	2	-	-	-
Bridgewater	-	0	1	-	-
Bristol	-	0	-	2	24-T1
Broadway	0	8	-	-	-
Clifton Forge	105-t	-	16-T1	-	-
Covington	571-t	-T1	83-T1	-	-
Crozet	-t	9-T1, Td	-	-	-
Dayton	8	2	4	-	-T1
Galax	-	0	1	-	-
Gordonville	234	5	-	-	-
Harrisonburg	0	8	2	11	22-T1
Hopewell	0	-	1	-	-
*Independence	1	-	-	-	-
Lexington	0	-	-	0-T1	23
Lovingston	89-t	5	-	-	-
Luray	-	-	-	0	3-T1
Lynchburg	8-t	0	15	5	25
Madison	0	10	-	-	-
Marion	-	2	-	-	-
Mount Jackson	1	-	0	-	-
Orange	29-t	4	-	-	-
Port Royal	12	5	-	-	-
Rappahannock Academy	200	9	-	-	-
*Roanoke Airport	1	-	-	-	-
Rocky Mount	3	1	2	-	-
*Smithfield	1	-	-	-	-
Staunton	-	-	-	0	6
Unionville	0	3	-	-	-
Warsaw	-	0	2	-	-
*Waverly	1	-	-	-	-
Waynesboro	1	-	-	0-T1	10
Williamsburg	3	0	-	3	1
Woodstock	0	-	-	0-T1	19-T1
Wytheville	13-t	-	4-T1	-	-
Yorktown	6	4	-	-	-
<u>WEST VIRGINIA</u>					
Beckley	-	0	-	-	10
Bluefield	-	0	-	-	9
Central Twp. (Doddridge Co.)	3	-	-	-	-
Elkins	-	12	-	-	-
Gassaway	-	10	3	-	-
Huntington	36	0	5	-	4
Pennsboro	-	1	-	-	-
Petersburg	-	23	-	-	-
Romney	-	6	-	-	-
St. Marys	-	2	-	-	8



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